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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,339	08/26/2003	Jung-Tao Liu	29250-001071/US	3513

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HARNESS, DICKEY & PIERCE, P.L.C.
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Reston, VA 20195

EXAMINER

ADDY, THJUAN KNOWLIN

ART UNIT	PAPER NUMBER
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2614

MAIL DATE	DELIVERY MODE
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09/24/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/647,339

Applicant(s)

LIU, JUNG-TAO

Examiner

Thjuan K. Addy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed on June 25, 2007 has been entered. Claims 9 and 10 have been amended. No claims have been cancelled. No claims have been added. Claims 1-20 are still pending in this application, with claims 1, 9, and 20 being independent.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 9, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Turina et al (US 6,501,745).

3. In regards to claims 1, 9, and 20, Turina discloses a method for transmitting control signals in a communication network (See Abstract), comprising: transmitting control signal data related to scheduling for uplink transmission of packet data over a single control channel (e.g., single transmission resource/physical channel), the single

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control channel configured based on a transmission mode (See Fig. 1, col. 3-4 lines 47-10, Claim 1, and Claim 8).

4. In regards to claim 2, Turina discloses the method, wherein the control channel carries different control signal data based on the transmission mode (See col. 4-5 lines 50-3).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3-8 and 10-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turina et al (US 6,501,745), in view of Naim et al (US Patent Application, Pub. No.: US 2002/0093953 A1).

6. In regards to claim 3, Turina discloses all of claim 3 limitations, except the method, wherein transmitting control signal data further includes transmitting one or more of medium access control buffer status data, transport format data, transport block size data and redundancy data, if the transmission mode is a scheduled transmission mode. Naim, however, does disclose the method, wherein transmitting control signal data further includes transmitting one or more of medium access control buffer status data, transport format data, transport block size data and redundancy data, if the transmission mode is a scheduled transmission mode (See pg. 3, paragraph [0032]).

Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to incorporate this feature within the method, as a way of allocating resources for data streams and allocating resources in a wireless system where the data includes an indication of its own resource needs.

7. In regards to claims 4 and 12, Naim discloses the method and control channel, wherein the scheduling mode specifies that users transmit on the uplink, start times for the user and duration of uplink transmission (See pg. 2, paragraph [0027]).

8. In regards to claims 5 and 13, Naim discloses the method and control channel, wherein transmitting control signal data further includes transmitting one or more of, transport format data, transport block size data, HARQ channel ID data and an indicator indicating whether data carried on a corresponding data channel is a new packet or a re-transmission of a previous packet, if the transmission mode is a rate-controlled transmission mode (See pg. 1, paragraph [0016] and pg. 2, paragraph [0026]).

9. In regards to claims 6 and 14, Naim discloses the method and control channel, wherein the rate-controlled mode specifies an allowed data rate for a user, the user transmitting autonomously, subject to the allowed data rate (See pg. 2, paragraph [0027]).

10. In regards to claims 7, 11, and 15, Naim discloses the method and control channel, wherein transmitting control signal data further includes transmitting one or more of medium access control (MAC) buffer status data, pilot transmit power data and data related to priority of a packet in the MAC buffer, if a user is configured in a reporting mode (See pg. 3, paragraph [0032]).

11. In regards to claims 8 and 16, Naim discloses the method, and control channel wherein the user transmits the control channel in the reporting mode when the user is neither scheduled for uplink transmission nor transmitting autonomously while subject to an allowed data rate for uplink transmission (See pg. 3, paragraph [0032]).

12. In regards to claim 10, Naim discloses the control channel, wherein the sub-frame is comprised of a plurality of slots, each slot containing a plurality of fields of control information that differs based on the transmission mode of the user (See pg. 2, paragraph [0027] and pg. 3, paragraph [0032], lines 7-16).

13. In regards to claim 17, Naim discloses a control channel for signaling control information related to scheduling a user for uplink transmission of packet data in a communication network, comprising: at least one sub-frame adapted to carry control information that is dependent based on the transmission mode the user is in for scheduling an uplink transmission from the user to the network (See pg. 1, paragraph [0005]; pg. 1, paragraph [0012] – [0013]); pg. 2, paragraph [0025]; and pg. 3, paragraph [0032], lines 9-22).

14. In regards to claim 18, Naim discloses all of claim 18, except wherein the at least one sub-frame has a 2 ms transmission time interval. Naim, however, discloses a range or time interval for at least one sub-frame (See pg. 1, paragraph [0027] and pg. 2, paragraph [0032]). Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to incorporate this feature within the system, as a way of further indicating a specific transmission time interval.

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15. In regards to claim 19, Naim discloses the control channel, wherein the at least one sub-frame has a transmission time interval adapted to be changed based on a desired control channel design, and wherein the number of fields within a given slot of the sub-frame remains constant for any given transmission time interval (See pg. 2, paragraph [0027] and pg. 3, paragraph [0032]).

Response to Arguments

16. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Comroe et al (US 5,239,674) teach a method for transferring private data transmissions from a trunking communication system to a cellular communication. Kamel et al (US 6,285,886) teach a method for controlling power for a communication system having multiple traffic channels per subscriber. Parantainen et al (US 7,092,373) teach an advanced method and arrangement for transferring information in a packet radio service.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thjuan K. Addy whose telephone number is (571) 272-7486. The examiner can normally be reached on Mon-Fri 8:30-5:00pm.

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19. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar can be reached on (571) 272-7488. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

20. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Thjuan K. Addy', with a stylized flourish at the end.

Thjuan K. Addy
Patent Examiner
AU 2614